

# **Curriculum Guide**

# Science - Autumn Term 2019

#### Year 5

Teacher: Dr Alistair Miller

Lessons: One double and two single lessons per week.

Homework: I x 25 minutes

## Introduction:

The science syllabus incorporates topics related to physics, chemistry and biology. Over the course of Year 5 the boys will learn about safety in the laboratory, measurement, states of matter, energy, forces, mixing and separating substances, elements, compounds and mixtures, cells; the building blocks of life, and the human body. There will be an assessment after each topic studied, and the boys will review their assessment papers and retain them to enable them to check their progress throughout the year and to identify areas which they need to spend more time revising before their summer examination. Whilst learning about each topic the boys will be given many opportunities to carry out practical experimental work in order to develop their investigation skills and techniques.

## **Key Objectives:**

- To understand and follow laboratory rules for working safely.
- To understand the three states of matter.
- To understand how to use measuring instruments.
- To understand units of measurements.
- To know the different types of energy and understand conservation of energy.
- To understand the final fate of energy as heat.
- To understand forces as pushes & pulls.
- To understand the effect of balanced and unbalanced forces on stationary and moving objects.
- To know about magnetism.

These key objectives will be covered alongside others in the units of work in each term. The topic areas to be covered for the Autumn Term are as follows:

- Safety in the laboratory
- Matter and Measurement
- Energy
- Forces

### Resources:

All boys must bring the following equipment to all lessons:

Pen or Biro (blue ink), pencil, rubber, pencil sharpener, 30cm ruler, calculator, colouring pencils, and a glue stick.

All boys will be issued with a printed booklet about each topic area and will complete written work and diagrams in their exercise books.